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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,093	11/29/2001	Paul E. Juras	61856	4334

109 7590 02/20/2004

THE DOW CHEMICAL COMPANY
INTELLECTUAL PROPERTY SECTION
P. O. BOX 1967
MIDLAND, MI 48641-1967

EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 02/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,093

Applicant(s)

JURAS ET AL.

Examiner

Victor S Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. The Examiner has carefully considered Applicants' remarks filed on 1/15/2004.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn. In particular, Applicants' argument that "Thum is not a load-bearing structure or used for load bearing. Therefore, ... references are not combinable." (Remarks, page 4, first full paragraph) is persuasive and sufficient to overcome the rejection under 35 U.S.C. 103(a) as being unpatentable over Thum (US 5194199) either individually, or in view of Newton (US 3581681), in section 5 of Paper No. 1007. However, Applicants' arguments are moot in view of the new grounds of rejection, as follows.

Response to Amendment

4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (US 5806919) in view of Newton (US 3581681).

Daves' invention is directed to a reinforcement insert formed of a low density composite or foam core to support a high density rigid composite or foam layer or shell within a structural joint. The reinforcement insert is dropped into the space between body panels. The body panels with insert may thereafter be subjected to high temperature processes causing the high density layer precursor to cure, further rigidify, and adhere the high density layer to the metal body panels to substantially stiffen the

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joint. The low density foam supports the high density layer precursor during the curing process. (Abstract). A suitable material for the high density layer precursor may be an epoxy based foam (column 2, lines 38-39).

For claims 1-6, Davies' curable high density layer cursor of epoxy based foam reads on the heat-activated expandable adhesive of instant invention. Davies lacks specific teachings that the structural filler material is formed inside a molded polymer shell of polyamide, polyolefin, etc., and the low density foam is a polyurethane foam. However, it is noted that Newton's invention is directed to a molded pallet having a construction of a thin-walled shell filled with a foam core (Abstract). The shell is shaped in the general configuration of a conventional pallet (column 1, lines 50-52). The shell material may be selected from a broad range of resinous sheet materials, including cellulose esters, polyamides, polyolefin, etc. (column 2, lines 30-50). Newton also teaches that a core of rigid polyurethane foam is cast in place in the shell to substantially fill the entire interior (column 3, lines 32-33). As such, it would have been obvious to one of ordinary skill in the art to modify the foam core of Davies' reinforcement insert with Newton's light weight composite of molded shell and foam core, motivated by the desire to obtain a shaped core in the general configuration to fit the hollow metal member, and to provide an integral support.

The method claims 7-10 essentially mirror the product claims, and employ only conventional method steps, and as such are rejected.

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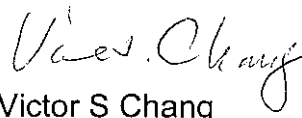
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In addition, the following references are cited of interest for making a reinforced member:

US 6668457 to Czaplicki is directed to a reinforced hydroform member having an outer structural member reinforced by a structural foam supported by the outer structural member (Abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Victor S Chang
Examiner
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